Supplement to *Food and Chemical Toxicology* Volume 36, Number 6, 1998

Food and Chemical Toxicology

An international journal published in association with BIBRA

Volume 35 1997

Volume Contents, Author and Subject Index

Pergamon

FOOD AND CHEMICAL TOXICOLOGY

An international journal published in association with BIBRA

Founding Editor

The late Leon Golberg

Editors

JOSEPH F. BORZELLECA
Department of Pharmacology and Toxicology, Medical College of Virginia, Richmond, VA 23298-0613, USA

MARCEL B. ROBERFROID
Unité de Biochimie Toxicologique et Cancérologique, Université Catholique de Louvain, UCL 7369, B-1200 Brussels, Belgium

Associate Editor

STUART E. JAGGERS
BIBRA International, Woodmansterne Road, Carshalton, Surrey SM5 4DS, UK

Review Editor

FRANCIS J. ROE
19 Marryatt Road, Wimbledon Common, London SW19 5BB, UK

Managing Editor

STELLA HILL
BIBRA International, Woodmansterne Road, Carshalton, Surrey SM5 4DS, UK

International Editorial Board

M. ANDERSEN, *USA*
L. S. ANDREWS, *USA*
P. H. BACH, *UK*
H. BARTSCH, *Germany*
A. BLACK, *Australia*
P. J. VAN BLADEREN, *The Netherlands*
A. R. BOOBIS, *UK*
J. CALDWELL, *UK*
C. C. CAPEN, *USA*
J. E. CHAMBERS, *USA*
S. M. COHEN, *USA*
T. F. X. COLLINS, *USA*
J. W. DANIEL, *UK*
D. J. DOOLITTLE, *USA*
D. J. ECOBICHON, *Canada*
V. J. FERON, *The Netherlands*
S. D. GANGOLLI, *UK*
H. R. GLATT, *Germany*
P. GRASSO, *UK*
G. C. HARD, *USA*
A. W. HAYES, *USA*
I. KIMBER, *UK*
J. C. LHUGUENOT, *France*
P. LI, *China*
M. I. LUSTER, *USA*
R. M. MCCLAIN, *USA*
H. I. MAIBACH, *USA*
K. MORGAN, *USA*
G. PASCAL, *France*
B. J. PHILLIPS, *UK*
J. POPP, *USA*
I. F. H. PURCHASE, *UK*
J. J. RAFTER, *Sweden*
D. RAY, *UK*
I. ROWLAND, *UK*
R. SCHEUPLEIN, *USA*
R. C. SHANK, *USA*
T. SUGIMURA, *Japan*
J. A. SWENBERG, *USA*
S. L. TAYLOR, *USA*
J. A. THOMAS, *USA*
J. C. TOPHAM, *UK*
H. VAINIO, *France*
J. H. WEISBURGER, *USA*

Elsevier Science Ltd, Bampfylde Street, Exeter EX1 2AH, UK

Published Monthly.

© 1997 Elsevier Science Ltd

Annual Institutional Subscription Rates 1998: Europe, The CIS and Japan NLG 2405.00. All other countries US$1382.00. Associated Personal Subscription rates are available on request for those whose institutions are library subscribers. Dutch Guilder prices exclude VAT. Non-VAT registered customers in the European Community will be charged the appropriate VAT in addition to the price listed. Prices include postage and insurance and are subject to change without notice.

Any enquiry relating to subscriptions should be sent to:

The Americas: Elsevier Science, Customer Support Department, P.O. Box 945, New York, NY 10010, USA. [*Tel:* (+1) 212-633-3730/1-888 4ES-INFO; *Fax:* (+1) 212-633-3680; *e-mail:* usinfo-f@elsevier.com].
Japan: Elsevier Science Customer Support Department, 9–15 Higashi-Azabu 1-chome, Minato-ku, Tokyo 106, Japan [*Tel:* (+81) 3-5561-5033; *Fax:* (+81) 3-5561-5047; *e-mail:* info@elsevier.co.jp].
Asia Pacific (*excluding Japan*): Elsevier Science (Singapore) Pte Ltd, No. 1 Temasek Avenue, 17-01 Millenia Tower, Singapore 03912 [*Tel:* (+65) 434-3727; *Fax:* (+65) 337-2230; *e-mail:* asiainfo@elsevier.com.sg].
Rest of the World: Elsevier Science Customer Service Department, P.O. Box 211, 1001 AE Amsterdam, The Netherlands [*Tel:* (+31) 20-485-3757; *Fax:* (+31) 20-485-3432; *e-mail:* nlinfo-f@elsevier.nl].

PERIODICALS POSTAGE PAID AT NEWARK, NEW JERSEY. *Food and Chemical Toxicology* (ISSN 0278-6915) is published monthly, January to December, by Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. The annual subscription in the USA is US$1382.00. *Food and Chemical Toxicology* is distributed by Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel, NJ 07001-2413, USA. POSTMASTER: please send address corrections to *Food and Chemical Toxicology*, c/o Elsevier Science, 655 Avenue of the Americas, New York, NY 10010, USA.

LIST OF CONTENTS

VOLUME 35 NUMBER 1

Table of Contents	v	
Glossary	vii	
Executive Summary		
J. A. Bradlaw and N. L. Wilcox	1–11	Workshop on eye irritation testing: practical applications of non-whole animal alternatives
R. A. Scala and J. Springer	13–22	IRAG Working Group 6: Guidelines for the evaluation of eye irritation alternative tests: criteria for data submission
M. Chamberlain, S. C. Gad, P. Gautheron and M. K. Prinsen	23–37	IRAG Working Group 1: Organotypic models for the assessment/prediction of ocular irritation
H. Spielmann, M. Liebsch, F. Moldenhauer, H.-G. Holzhütter, D. M. Bagley, J. M. Lipman, W. J. W. Pape, H. Miltenburger, O. de Silva, H. Hofer and W. Steiling	39–66	IRAG Working Group 2: CAM-based assays
P. Botham, R. Osborne, K. Atkinson, G. Carr, M. Cottin and R. G. Van Buskirk	67–77	IRAG Working Group 3: Cell function-based assays
J. W. Harbell, S. W. Koontz, R. W. Lewis, D. Lovell and D. Acosta	79–126	IRAG Working Group 4: Cell cytotoxicity assays
R. D. Curren, J. F. Sina, P. Feder, F. H. Kruszewski, R. Osborne and J.-F. Régnier	127–158	IRAG Working Group 5: Other assays
O. de Silva, M. Cottin, N. Dami, R. Roguet, P. Catroux, A. Toufic, C. Sicard, K. G. Dossou, I. Gerner, E. Schlede, H. Spielmann, K. C. Gupta and R. N. Hill	159–164	Evaluation of eye irritation potential: statistical analysis and tier testing strategies
L. H. Bruner, H. Spira, M. Balls and R. N. Hill	165–166	Perspectives on alternatives to the eye irritation test: industry, public interest, government
P. Feder, G. Carr, H.-G. Holzhütter, D. Lovell and J. Springer	167–174	Appendix I: Statistical planning and analysis considerations in the evaluation of *in vitro* alternatives to whole animal use of eye irritation testing
J. Bradlaw, K. Gupta, S. Green, R. Hill and N. Wilcox	175–178	Appendix II: Practical application of non-whole animal alternatives: summary of IRAG workshop on eye irritation testing
Information Section	179	
Forthcoming Papers	183	

VOLUME 35 NUMBER 2

Research Section		
B. Stavric, B. P.-Y. Lau, T. I. Matula, R. Klassen, D. Lewis and R. H. Downie	185–197	Mutagenic heterocyclic aromatic amines (HAAs) in 'processed food flavour' samples

B. Stavric, B. P.-Y. Lau, T. I. Matula, R. Klassen, D. Lewis and R. H. Downie	199–206	Heterocyclic aromatic amine content in pre-processed meat cuts produced in Canada
R. W. Lane, J. Yamakoshi, M. Kikuchi, K. Mizusawa, L. Henderson and M. Smith	207–212	Safety evaluation of tannase enzyme preparation derived from *Aspergillus oryzae*
K. Kangsadalampai, C. Butryee and K. Manoonphol	213–218	Direct mutagenicity of the polycyclic aromatic hydrocarbon-containing fraction of smoked and charcoal-broiled foods treated with nitrite in acid solution
E. Kolb, M. Haug, C. Janzowski, A. Vetter and G. Eisenbrand	219–224	Potential nitrosamine formation and its prevention during biological denitrification of red beet juice
R. Poon, P. Lecavalier, R. Mueller, V. E. Valli, B. G. Procter and I. Chu	225–239	Subchronic oral toxicity of di-*n*-octyl phthalate and di(2-ethylhexyl) phthalate in the rat
W. T. Stott, M. J. Beekman, K. A. Johnson and P. J. Spencer	241–254	Evaluation of a novel assay of potential toxicity/neurotoxicity of carpet emissions (VOCs) in mice
H. A. Griffiths, K.-P. Wilhelm, M. K. Robinson, X. M. Wang, J. McFadden, M. York and D. A. Basketter	255–260	Interlaboratory evaluation of a human patch test for the identification of skin irritation potential/hazard
R. J. Dearman, M. Cumberbatch, J. Hilton, I. Fielding, D. A. Basketter and I. Kimber	261–269	A re-appraisal of the skin-sensitizing activity of 2,4-dinitrothiocyanobenzene
Review Section		
A. J. Cohen and F. J. C. Roe	271–293	Evaluation of the aetiological role of dietary salt exposure in gastric and other cancers in humans
Letter to the Editor	295	
Information Section	297	
Forthcoming Papers	I	

VOLUME 35 NUMBER 3/4

Research Section		
B. A. R. Lina, A. E. Smits-Van Prooije and D. H. Waalkens-Berendsen	309–314	Embryotoxicity/teratogenicity study with isomaltulose (Palatinose™) in rats
T. M. M. Coenen, P. Aughton and H. Verhagen	315–322	Safety evaluation of lipase derived from *Rhizopus oryzae*: summary of toxicological data
T. Kimoto, T. Shibuya and S. Shiobara	323–329	Safety studies of a novel starch, pullulan: chronic toxicity in rats and bacterial mutagenicity
K. Toyoda, T. Shoda, C. Uneyama, K. Takada and M. Takahashi	331–336	Carcinogenicity study of β-cyclodextrin in F344 rats
H. P. Til, H. E. Falke, M. K. Prinsen and M. I. Willems	337–348	Acute and subacute toxicity of tyramine, spermidine, spermine, putrescine and cadaverine in rats
H. P. Til, C. F. Kuper and H. E. Falke	349–355	Nitrite-induced adrenal effects in rats and the consequences for the no-observed-effect level
R. Edenharder and X. Tang	357–372	Inhibition of the mutagenicity of 2-nitrofluorene, 3-nitrofluoranthene and 1-nitropyrene by flavonoids, coumarins, quinones and other phenolic compounds

X. Tang and R. Edenharder	373–378	Inhibition of the mutagenicity of 2-nitrofluorene, 3-nitrofluoranthene and 1-nitropyrene by vitamins, porphyrins and related compounds, and vegetable and fruit juices and solvent extracts
S. R. R. Musk, P. Clapham and I. T. Johnson	379–385	Cytotoxicity and genotoxicity of diallyl sulfide and diallyl disulfide towards Chinese hamster ovary cells
F. Furukawa, A. Nishikawa, T. Enami, M. Mitsui, T. Imazawa, Z. Tanakamaru, H-C. Kim, I-S. Lee, K. Kasahara and M. Takahashi	387–392	Promotional effects of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol (NNAL) on *N*-nitrosobis(2-oxopropyl)amine (BOP)-initiated carcinogenesis in hamsters
L. G. Lomax, N. D. Krivanek and S. R. Frame	393–407	Chronic inhalation toxicity and oncogenicity of methyl methacrylate in rats and hamsters
P. Nasseri-Sina, S. A. M. Hotchkiss and J. Caldwell	409–416	Cutaneous xenobiotic metabolism: glycine conjugation in human and rat keratinocytes
Review Section		
D. A. Basketter, G. Cookman, G. F. Gerberick, N. Hamaide and M. Potokar	417–425	Skin sensitization thresholds: determination in predictive models
Information Section	427–432	
Forthcoming Papers	1	

VOLUME 35 NUMBER 5

Research Section		
C. P. Salmon, M. G. Knize and J. S. Felton	433–441	Effects of marinating on heterocyclic amine carcinogen formation in grilled chicken
S. C. Sahu and G. C. Gray	443–447	Lipid peroxidation and DNA damage induced by morin and naringenin in isolated rat liver nuclei
S. Kataoka, W. Liu, K. Albright, J. Storkson and M. Pariza	449–457	Inhibition of benzo[*a*]pyrene-induced mouse forestomach neoplasia and reduction of H_2O_2 concentration in human polymorphonuclear leucocytes by flavour components of Japanese-style fermented soy sauce
R. B. Brandt, B. A. Doyle, W. Chan, J. L. Poland and H. R. Seibel	459–463	The effects of running stress on plasma vitamin A levels in rats
E. Atzpodien, N. Mehdi, D. Clarke and S. Radhofer-Welte	465–474	Subacute and chronic oral toxicity of lornoxicam in cynomolgus monkeys
K. Yasuhara, T. Shimo, K. Mitsumori, H. Onodera, K. Kitaura and M. Takahashi	475–480	Lack of carcinogenicity of cyanoguanidine in F344 rats
H.-W. Leung and J. P. van Miller	481–487	Effects of diethylenetriamine dihydrochloride following 13 weeks of dietary dosing in Fischer 344 rats
J. Hellwig and R. Jäckh	489–500	Differential prenatal toxicity of one straight-chain and five branched-chain primary alcohols in rats
J. Hellwig, H. Freudenberger and R. Jäckh	501–512	Differential prenatal toxicity of branched phthalate esters in rats
R. C. Wester, T. Hartway, S. Serranzana and H. I. Maibach	513–515	Human skin *in vitro* percutaneous absorption of gaseous ethylene oxide from fabric
Brief Communications		
O. Alabaster, Z. Tang and N. Shivapurkar	517–522	Inhibition by wheat bran cereals of the development of aberrant crypt foci and colon tumours

R. C. Agrawal, Y. Shukla and N. K. Mehrotra 523–525 Assessment of mutagenic potential of thiram

Information Section 527–533

Forthcoming Papers I

VOLUME 35 NUMBER 6

Research Section

F. Bolognani, C. J. Rumney and I. R. Rowland 535–545 Influence of carcinogen binding by lactic acid-producing bacteria on tissue distribution and *in vivo* mutagenicity of dietary carcinogens

G. Gross, E. Jaccaud and A. C. Huggett 547–554 Analysis of the content of the diterpenes cafestol and kahweol in coffee brews

K. Skog, K. Augustsson, G. Steineck, M. Stenberg and M. Jägerstad 555–565 Polar and non-polar heterocyclic amines in cooked fish and meat products and their corresponding pan residues

E. Madrigal-Bujaidar, S. Diaz Barriga, P. Mota, R. Guzman and M. Cassani 567–571 Sister chromatid exchanges induced *in vitro* and *in vivo* by an extract of black pepper

R. A. Hempenius, J. M. H. Van Delft, M. Prinsen and B. A. R. Lina 573–581 Preliminary safety assessment of an arachidonic acid-enriched oil derived from *Mortierella alpina*: summary of toxicological data

V. M. Gandhi, M. J. Mulky, B. Mukerji, V. J. Iyer and K. M. Cherian 583–587 Safety evaluation of wild apricot oil

P. E. Noker, T.-H. Lin, D. L. Hill and T. Shigeoka 589–595 Metabolism of ^{14}C-labelled sucrose esters of stearic acid in rats

K. Toyoda, H. Matsui, T. Shoda, C. Uneyama, K. Takada and M. Takahashi 597–603 Assessment of the carcinogenicity of stevioside in F344 rats

S. E. Kulling and M. Metzler 605–613 Induction of micronuclei, DNA strand breaks and HPRT mutations in cultured Chinese hamster V79 cells by the phytoestrogen coumoestrol

W. Vleeming, A. Van de Kuil, J. D. te Biesebeek, J. Meulenbelt and A. B. T. J. Boink 615–619 Effect of nitrite on blood pressure in anaesthetized and free-moving rats

Brief Communication

M. P. Martínez, R. Angulo, R. Pozo and M. Jodral 621–624 Organochlorine pesticides in pasteurized milk and associated health risks

Review Section

J. B. Hallagan, B. N. La Du, M. W. Pariza, J. M. Putnam and J. F. Borzelleca 625–632 Assessment of cassia gum

Information Section 633–638

Forthcoming Papers I

VOLUME 35 NUMBER 7

Research Section

J. T. Blankemeyer, J. B. White, B. K. Stringer and Mendel Friedman 639–646 Effect of α-tomatine and tomatidine on membrane potential of frog embryos and active transport of ions in frog skin

W. C. A. Gelderblom, C. M. Smuts, S. Abel, S. D. Snyman, L. Van der Westhuizen, W. W. Huber and S. Swanevelder 647–656 Effect of fumonisin B_1 on the levels and fatty acid composition of selected lipids in rat liver *in vivo*

P. Mukherjee, D. Sarkar (Datta) and A. Sharma 657–661 Effects of dietary consumption of black tea infusion alone and in combination with known clastogens on mouse bone marrow chromosomes *in vivo*

H.-R. Ju, M. Okumiya, S. Nishizono, M. Ki, M. Sugano and K. Imaizumi 663–668 Increase in degranulation of mucosal mast cells in rats sensitized with milk whey protein hydrolysates compared with native proteins

E. Evdokimova, M. Martos and P. M. Buc Calderon 669–675 Protective effect of fructose on survival and metabolic capacities of hepatocytes kept overnight under cold hypoxia before normothermic reoxygenation

J. Hellwig, H.-J. Klimisch and M. Beth-Hübner 677–681 Study on the developmental toxicity of orally administered isobutylidene-diurea in rats

C. L. Gaworski, M. M. Dozier, J. M. Gerhart, N. Rajendran, L. H. Brennecke, C. Aranyi and J. D. Heck 683–692 13-Week inhalation toxicity study of menthol cigarette smoke

M. A. Pélissier, N. Savouré, G. Briand and R. Albrecht 693–696 Endogenous glutathione as potential protectant against free radicals in the skin of vitamin A deficient mice

M. F. Hughes and L. L. Hall 697–704 *In vivo* disposition of *p*-substituted phenols in the young rat after intraperitoneal and dermal administration

K. A. Walters, K. R. Brain, W. E. Dressler, D. M. Green, D. Howes, V. J. James, C. K. Kelling, A. C. Watkinson and S. D. Gettings 705–712 Percutaneous penetration of *N*-nitroso-*N*-methyldodecylamine through human skin *in vitro*: application from cosmetic vehicles

J. F. Tomera and C. Harakal 713–718 Multiple linear regression analysis of blood pressure, hypertrophy, calcium and cadmium in hypertensive and non-hypertensive states

Review Section

P. Baldrick and D. G. Bamford 719–733 A toxicological review of lactose to support clinical administration by inhalation

Information Section 735–738

Announcements I

Forthcoming Papers VI

VOLUME 35 NUMBER 8

Research Section

T. B. Adams, J. Doull, J. I. Goodman, I. C. Munro, P. Newberne, P. S. Portoghese, R. L. Smith, B. M. Wagner, C. S. Weil, L. A. Woods and R. A. Ford 739–752 The FEMA GRAS assessment of furfural used as a flavour ingredient

M. McFarlane, S. C. Price, S. Cottrell, P. Grasso, J. N. Bremmer, E. M. Bomhard and R. H. Hinton 753–767 Hepatic and associated response of rats to pregnancy, lactation and simultaneous treatment with butylated hydroxytoluene

O. A. Al-Shabanah 769–775 Effect of evening primrose oil on gastric ulceration and secretion induced by various ulcerogenic and necrotizing agents in rats

R. Roscher, H. Koch, M. Herderich, P. Schreier and W. Schwab	777–782	Identification of 2,5-dimethyl-4-hydroxy-3[2*H*]furanone β-D-glucuronide as the major metabolite of a strawberry flavour constituent in humans
S. Mori, T. Murai, M. Hosono, S. Machino, S. Makino, C. Chou and S. Fukushima	783–787	Lack of promotion of urinary bladder carcinogenesis by sodium bicarbonate and/or L-ascorbic acid in male ODS/Shi-*od*/*od* rats synthesizing $\alpha_{2\mu}$-globulin but not L-ascorbic acid
P. K. Baijal, D. W. Fitzpatrick and R. P. Bird	789–798	Phenobarbital and 3-methylcholanthrene treatment alters phase I and II enzymes and the sensitivity of the rat colon to the carcinogenic activity of azoxymethane
K. Mitsumori, H. Onodera, T. Shoda, C. Uneyama, T. Imazawa, K. Takegawa, K. Yasuhara, T. Watanabe and M. Takahashi	799–806	Liver tumour-promoting effects of oxfendazole in rats
K. S. McKenzie, A. B. Sarr, K. Mayura, R. H. Bailey, D. R. Miller, T. D. Rogers, W. P. Norred, K. A. Voss, R. D. Plattner, L. F. Kubena and T. D. Phillips	807–820	Oxidative degradation and detoxification of mycotoxins using a novel source of ozone
M. R. Philo, P. J. Fordham, A. P. Damant and L. Castle	821–826	Measurement of styrene oxide in polystyrenes, estimation of migration to foods, and reaction kinetics and products in food simulants
Brief Communications		
J. Cao, Y. Zhao and J. Liu	827–833	Brick tea consumption as the cause of dental fluorosis among children from Mongol, Kazak and Yugu populations in China
M. Das, S. Ramchandani, R. K. Upreti and S. K. Khanna	835–838	Metanil yellow: a bifunctional inducer of hepatic phase I and phase II xenobiotic-metabolizing enzymes
Review Section		
J. J. Hostýnek	839–844	Gold: an allergen of growing significance
Viewpoint		
D. A. Basketter, M. Chamberlain, H. A. Griffiths, M. Rowson, E. Whittle and M. York	845–852	The classification of skin irritants by human patch test
Information Section	853–858	
Forthcoming Papers	I	
Announcements	II	

VOLUME 35 NUMBER 9

Research Section		
J. Hellwig, Chr. Gembardt and S. R. Murphy	859–868	Acrylic acid: two-generation reproduction toxicity study in Wistar rats with continuous administration in the drinking water
T. L. Neeper-Bradley, E. H. Fowler, I. M. Pritts and T. R. Tyler	869–880	Developmental toxicity study of inhaled acrylic acid in New Zealand White rabbits
R. L. Sprando, T. F. X. Collins, T. N. Black, J. Rorie, M. J. Ames and M. O'Donnell	881–890	Testing the potential of sodium fluoride to affect spermatogenesis in the rat
Y. Lind, J. Engman, L. Jorhem and A. W. Glynn	891–895	Cadmium accumulation in liver and kidney of mice exposed to the same weekly cadmium dose continuously or once a week
F. Rafii, J. D. Hall and C. E. Cerniglia	897–901	Mutagenicity of azo dyes used in foods, drugs and cosmetics before and after reduction by *Clostridium* species from the human intestinal tract

H. Hadidi, K. Zahlsen, J. R. Idle and S. Cholerton 903–907 A single amino acid substitution (Leu160His) in cytochrome *P*450 CYP2A6 causes switching from 7-hydroxylation to 3-hydroxylation of coumarin

G. Pohlmeyer-Esch, N. Mehdi, D. Clarke and S. Radhofer-Welte 909–922 Evaluation of chronic oral toxicity and carcinogenic potential of lornoxicam in rats

Brief Communication

M. K. Prinsen, T. Romijn and N. J. Snoeij 923–926 Skin sensitization testing: the relevance of rechallenge and pretreatment with sodium lauryl sulfate in the guinea pig maximization test

Information Section 927–932

Forthcoming Papers I

VOLUME 35 NUMBER 10/11

Research Section

M. Bollard, S. Stribbling, S. Mitchell and J. Caldwell 933–943 The disposition of allyl isothiocyanate in the rat and mouse

R. Reistad, O. J. Rossland, K. J. Latva-Kala, T. Rasmussen, R. Vikse, G. Becher and J. Alexander 945–955 Heterocyclic aromatic amines in human urine following a fried meat meal

J.-J. Kang, H.-W. Wang, T.-Y. Liu, Y.-C. Chen and T.-H. Ueng 957–965 Modulation of cytochrome *P*-450-dependent monooxygenases, glutathione and glutathione *S*-transferase in rat liver by geniposide from *Gardenia jasminoides*

G. J. Wibert, R. A. Burns, D. A. Diersen-Schade and C. M. Kelly 967–974 Evaluation of single cell sources of docosahexaenoic acid and arachidonic acid: a 4-week oral safety study in rats

E. O. Farombi, J. O. Nwankwo and G. O. Emerole 975–979 Possible modulatory effect of browned yam flour diet on chemically-induced toxicity in the rat

G. S. Bondy, C. A. M. Suzuki, S. M. Fernie, C. L. Armstrong, S. L. Hierlihy, M. E. Savard and M. G. Barker 981–989 Toxicity of fumonisin B_1 to B6C3F_1 mice: a 14-day gavage study

J. J. Hlywka, M. M. Beck and L. B. Bullerman 991–999 The use of the chicken embryo screening test and brine shrimp (*Artemia salina*) bioassays to assess the toxicity of fumonisin B_1 mycotoxin

J. G. Chung, H. H. Wang, L. T. Wu, S. S. Chang and W. C. Chang 1001–1007 Inhibitory actions of emodin on arylamine *N*-acetyltransferase activity in strains of *Helicobacter pylori* from peptic ulcer patients

C. S. Roper, D. Howes, P. G. Blain and F. M. Williams 1009–1016 Percutaneous penetration of 2-phenoxyethanol through rat and human skin

N. O. Mocchiutti and C. A. Bernal 1017–1021 Effects of chronic di(2-ethylhexyl) phthalate intake on the secretion and removal rate of triglyceride-rich lipoproteins in rats

G. V. Katz, W. D. Faber, L. G. Bernard, R. A. Moulton, R. M. David, M. S. Vlaovic and W. M. Dyer, Jr 1023–1030 Subchronic inhalation toxicity study of a water-dispersible polyester in rats

S. J. Hermansky and H. W. Leung 1031–1039 Cutaneous toxicity studies with methoxy polyethylene glycol-350 (MPEG-350) in rats and rabbits

H.-J. Klimisch, K. Deckardt, Chr. Gembardt, B. Hildebrand, K. Küttler and F. J. C. Roe 1041–1060 Long-term inhalation toxicity of *N*-vinylpyrrolidone-2 vapours. Studies in rats

H.-J. Klimisch, K. Deckardt, Chr. Gembardt, B. Hildebrand, K. Küttler and F. J. C. Roe 1061–1074 Subchronic inhalation and oral toxicity of *N*-vinylpyrrolidone-2. Studies in rodents

T. Kitamura, J. Ando, R. Ishihara, S. Takano, T. Iijima, S. Nishimura, M. Yoshida, M. Takahashi and A. Maekawa 1075–1080 Lack of carcinogenicity of thiamphenicol in F344 rats

R. C. Agrawal and N. K. Mehrotra 1081–1084 Assessment of mutagenic potential of propoxur and its modulation by indole-3-carbinol

C. L. Wrzesinski, W. P. Feeney, W. F. Feely and L. S. Crouch 1085–1089 Dermal penetration of 4″-(*epi*-methylamino)-4″-deoxyavermectin B_{1a} benzoate in the rhesus monkey

K. Enslein, V. K. Gombar, B. W. Blake, H. I. Maibach, J. J. Hostynek, C. C. Sigman and D. Bagheri 1091–1098 A quantitative structure–toxicity relationships model for the dermal sensitization guinea pig maximization assay

Regulatory

A. P. Walker, D. A. Basketter, M. Baverel, W. Diembeck, W. Matthies, D. Mougin, R. Röthlisberger and M. Coroama 1099–1106 Test guidelines for the assessment of skin tolerance of potentially irritant cosmetic ingredients in man

Review Section

C. J. Smith, S. D. Livingston and D. J. Doolittle 1107–1130 An international literature survey of "IARC Group I Carcinogens" reported in mainstream cigarette smoke

Information Section 1131–1134

Forthcoming Papers I

VOLUME 35 NUMBER 12

Research Section

T. J. Flynn, M. E. Stack, A. L. Troy and S. J. Chirtel 1135–1141 Assessment of the embryotoxic potential of the total hydrolysis product of fumonisin B_1 using cultured organogenesis-staged rat embryos

Y. Ueno, K. Iijima, S.-D. Wang, Y. Sugiura, M. Sekijima, T. Tanaka, C. Chen and S.-Z. Yu 1143–1150 Fumonisins as a possible contributory risk factor for primary liver cancer: a 3-year study of corn harvested in Haimen, China, by HPLC and ELISA

S. E. Hsieh, H. H. Lo, Y. S. Yen and J. G. Chung 1151–1157 The effect of vitamin C on *N*-acetyltransferase activity in *Klebsiella pneumoniae*

T.-H. Tseng, E.-S. Kao, C.-Y. Chu, F.-P. Chou, H.-W. Lin Wu and C.-J. Wang 1159–1164 Protective effects of dried flower extracts of *Hibiscus sabdariffa* L. against oxidative stress in rat primary hepatocytes

J. M. Campbell, G. C. Fahey Jr, S. J. Demichele and K. A. Garleb 1165–1176 Metabolic characteristics of healthy adult males as affected by ingestion of a liquid nutritional formula containing fish oil, oligosaccharides, gum arabic and antioxidant vitamins

A. Mukherjee and J. Chakrabarti 1177–1179 *In vivo* cytogenetic studies on mice exposed to acesulfame-K—a non-nutritive sweetener

T. Shoda, K. Toyoda, C. Uneyama, K. Takada and M. Takahashi 1181–1190 Lack of carcinogenicity of medium-viscosity liquid paraffin given in the diet to F344 rats

D. L. Arnold, E. A. Nera, R. Stapley, F. Bryce, S. Fernie, G. Tolnai, D. Miller, S. Hayward, J. S. Campbell and I. Greer 1191–1207 Toxicological consequences of Aroclor 1254 ingestion by female rhesus (*Macaca mulatta*) monkeys and their nursing infants. Part 3: post-reproduction and pathological findings

J. Hilton, R. J. Dearman, N. Sattar, D. A. Basketter and I. Kimber	1209–1218	Characteristics of antibody responses induced in mice by protein allergens
K. A. Walters, K. R. Brain, D. Howes, V. J. James, A. L. Kraus, N. M. Teetsel, M. Toulon, A. C. Watkinson and S. D. Gettings	1219–1225	Percutaneous penetration of octyl salicylate from representative sunscreen formulations through human skin *in vitro*
Information Section	1227–1233	
Announcements	I	
Forthcoming Papers	VI	